National Snow and Ice Data Center

Supporting Cryospheric Research Since 1976

NSIDC DAAC

Status of AMSR-E at NSIDC

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NSIDC Product Team Lead, AMSR-E

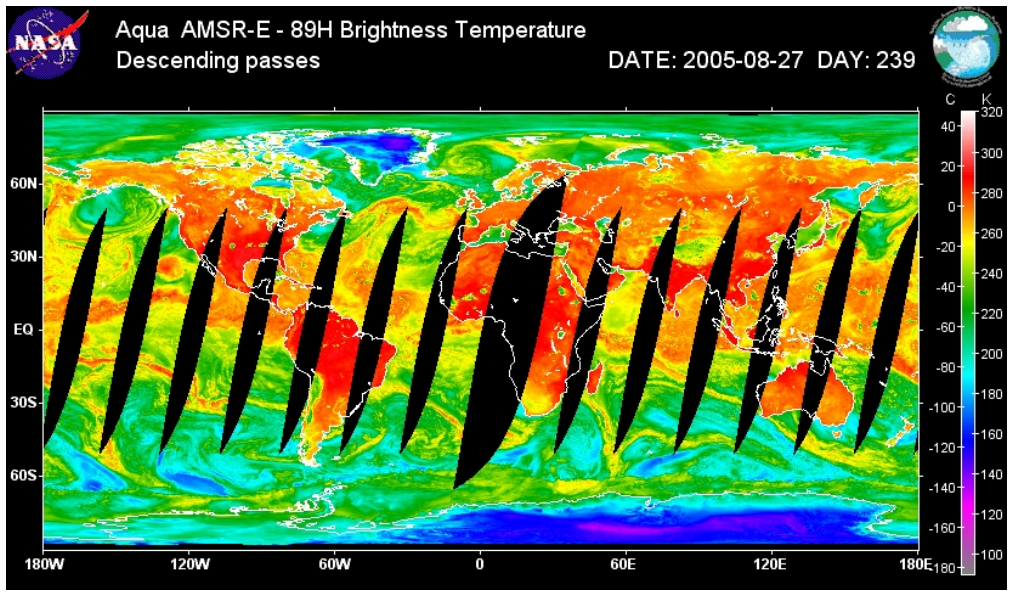
Joint AMSR-E Science Team Meeting

Honolulu, Hawaii

Sept. 13-15, 2005

Aqua/AMSR-E Outline

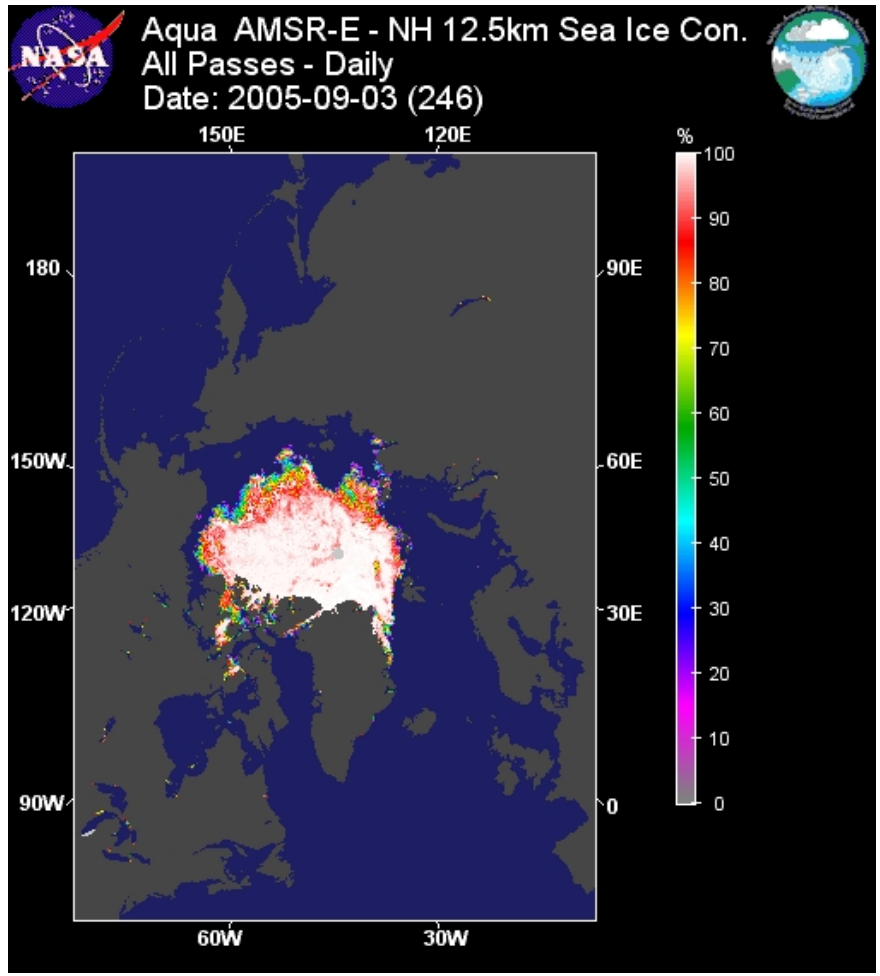
- *Aqua/AMSR-E Status of Current Operations*
- *Documentation*
- *Ordering AMSR-E Data: via EDG, Data Pool, SNOWI and V0 sidads*
- *Tools for AMSR-E data users*
- *AMSR-E Distribution Stats*
- *Questions for Science Team*



AMSR-E Current Operations

We're ingesting and distributing:

- L1A Raw Observation Counts
- L2A TBs
- L2B and L3 Products:
  - Rain
  - Ocean
  - Land/Soil moisture
  - Snow
  - Sea Ice

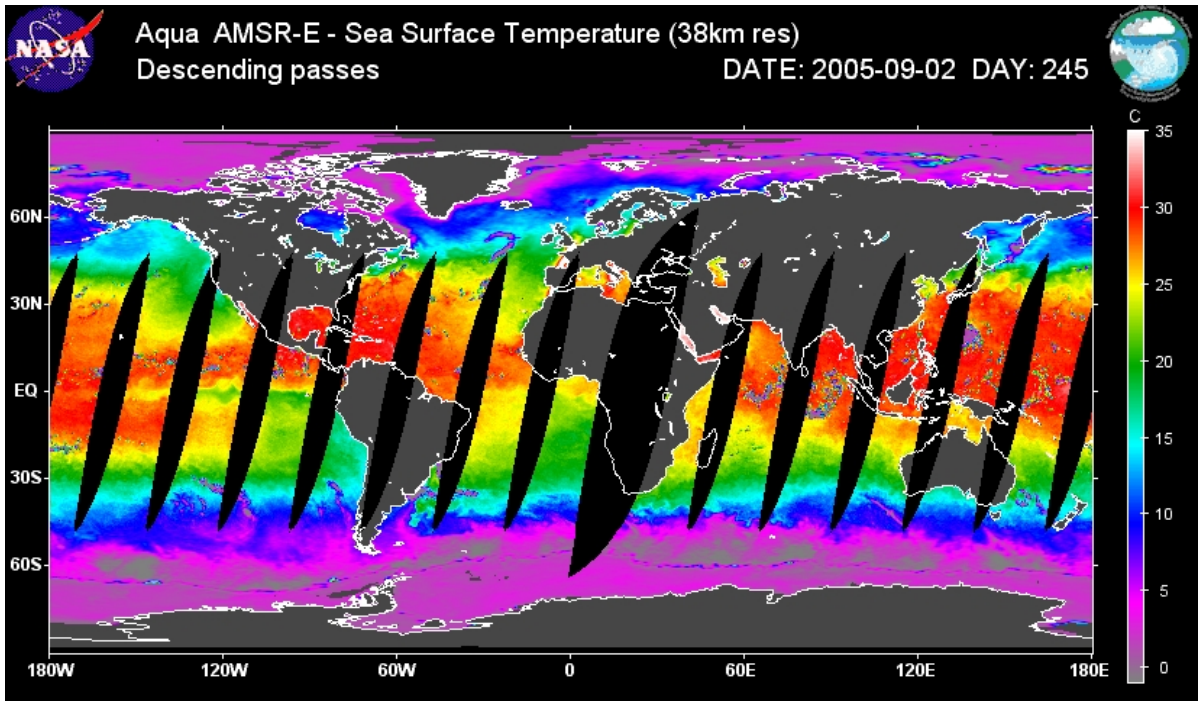


Various "versions" (product maturity indicators) for different products

Version 1							
	B01 algorithm	**B02 algorithm**	**B03 algorithm**	**B04 algorithm**	**B05 algorithm**	**B06 algorithm**	**B07 algorithm**
AE_L2A	2002-06-18 (23:40) to 2004-11-04 (00:46)	2004-11-04 (00:46) to 2005-01-02 (00:27)	2004-12-06 (21:22) to 2005-03-01 (00:14)	2005-03-01 (00:14) to 2005-08-30 (04:33)	2005-08-30 (04:33) to present		
AE_Land	2002-06-18 (23:40) to 2005-02-09 (22:05)	2005-02-09 (22:04) to 2005-06-29 (04:21)	2005-06-02 (23:37) to 2005-08-25 (00:57)	2005-08-25 (00:57) to present			
AE_Land3	2002-06-18 to 2005-02-22	2005-02-15 to present					
AE_Ocean	2002-06-18 (23:40) to 2005-02-07 (23:56)	2005-02-07 (23:56) to 2005-08-23 (04:27)	2005-08-23 (04:27) to present				
AE_DyOcn	2002-06-18 (23:40) to 2005-08-19 (12:44)	2005-08-19 (12:44) to present					
AE_WkOcn	2002-06-18 (23:40) to 2005-08-14 (12:26)	2005-08-14 (12:26) to present					
AE_MoOcn	2002-06-18 to 2005-08-23	2005-08-23 to present					
AE_Rain		2002-06-18 (23:40) to 2004-09-24 (14:04)	2004-09-24 (14:04) to 2004-11-04 (00:46)	2004-11-04 (00:46) to 2005-04-01 (04:28)	2005-04-01 (04:27) to 2005-07-06 (04:28)	2005-06-02 (04:28) to 2005-08-23 (04:27)	2005-08-23 (04:27) to present
AE_RnGd		2002-06-18 to 2004-11-01	2004-11-01 to 2005-08-25	2005-08-25 to present			
AE_SI6		2002-06-18 (23:40) to 2004-09-24 (00:03)	2004-09-24 (00:03) to 2005-02-25 (00:39)	2005-02-25 (00:39) to present			
AE_SI12		2002-06-18 (23:40) to 2004-09-24 (00:03)	2004-09-24 (00:03) to 2005-02-25 (00:39)	2005-02-25 (00:39) to present			
AE_SI25		2002-06-18 (23:40) to 2004-09-24 (00:03)	2004-09-24 (00:03) to 2005-02-25 (00:39)	2005-02-25 (00:39) to present			
AE_DySno		2002-06-19 (00:29) to 2004-11-28 (00:46)	2004-11-25 (12:15) to 2005-02-25 (00:39)	2005-02-25 (00:39) to present			
AE_5DSno		2002-06-20 (00:23) to 2004-11-17 (00:15)	2004-11-22 (00:33) to 2005-02-20 (00:21)	2005-02-20 (00:20) to present			
AE_MoSno		2002-06-19 to 2004-11-01	2004-11-01 to 2005-02-01	2005-02-01 to present			

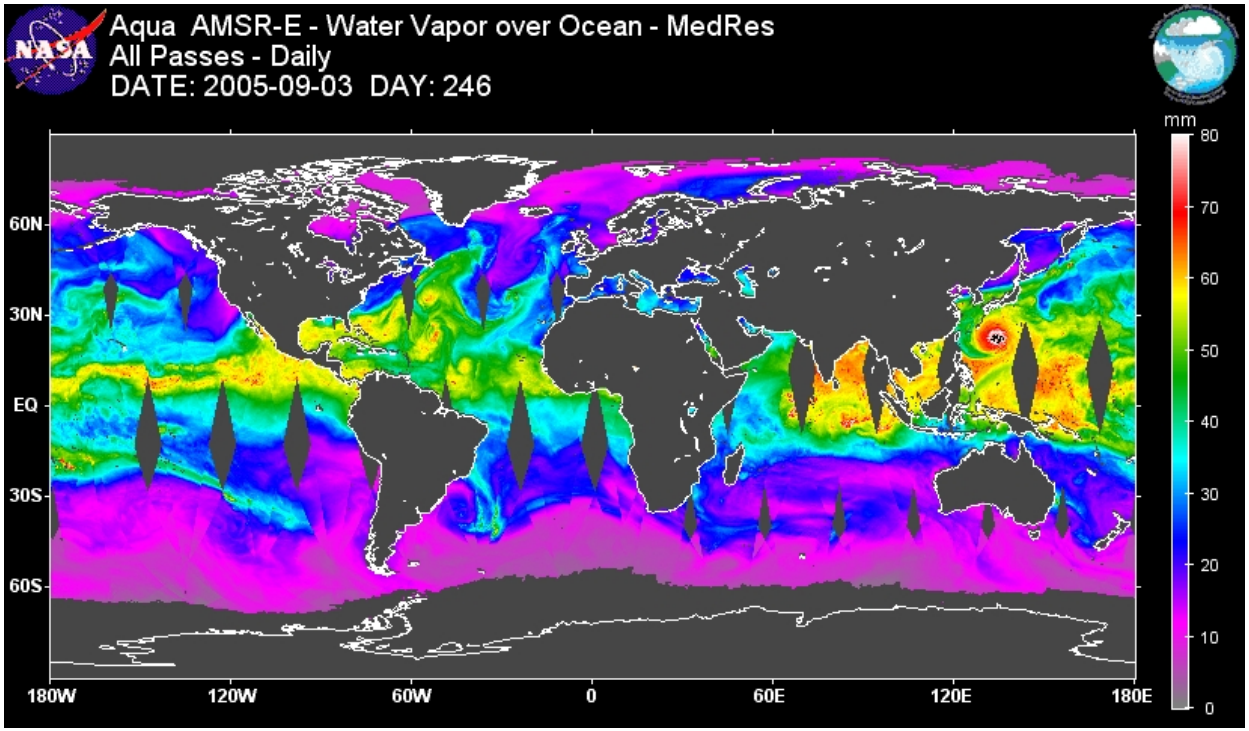
Documentation: ATBDs Need Revision

- ATBDs are out of date
- Our user guides (guide documents) refer/link to ATBDs
- What's the plan for revising these?



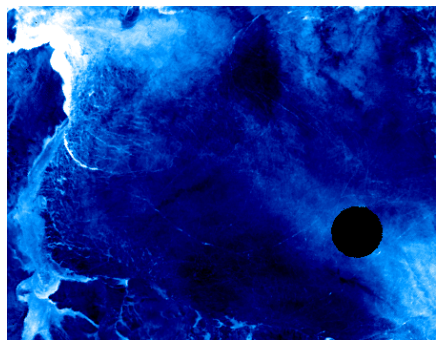
Documentation: Need estimates of accuracy of measurements

What is the status of quantifying the errors in measurement for each product?



Documentation

What is the schedule for updating the Data Management Plan?



March 5, 2004 see ice, near Barrow. Image courtesy of Walt Meier, NSIDC.

Ordering AMSR-E Data from NSIDC

http://nsidc.org/data/amsre/order.html

- **Standard Products:**
  - **Data Pool:** All AMSR-E products are retained for 90 days (at the present).
  - **EOS Data Gateway:** This interface provides access to the entire archive of data. Provides access to HEW subsetter.
  - **Search 'N Order Interface (SNOWI):** This tool provides a quick and simple way to search and order limited products from NSIDC and other Distributed Active Archive Centers (DAACs).
- **Preliminary ("NRT") Data**:
  - Registration is required to access the most recent eight days of data via FTP. These data are on a V0 (non-ECS) server.

Tools for AMSR-E Data

AMSR-E Tools Page at http://nsidc.org/data/amsre/tools.html

- AMSR-E Swath to Grid Toolkit (AS2GT):
  http://nsidc.org/data/tools/pmsdt/as2gt.html
  - subset and grid Level-1B and Level-2A AMSR-E swath data.
  - makes it easy to process data into custom grids with any temporal or spatial resolution.
  - part of the NSIDC Passive Microwave Swath Data Tools (PMSDT).
  - When you download the software, you get AS2GT as part of the larger package that will also allow you to work with some forms of SSM/I and SMMR data
- HEW subsets L2A, L2B and L3 products (minus the L2B soil moisture, which is point format); via the EDG.

•Fortran readers for Level-2B rain data (AE_Rain) are available from

•Land masks: AMSR-E land masks incorporated into the 6.25, 12.5, and 25 km resolution sea ice products are available as separate arrays in HDF format at each resolution. The land masks are in a polar stereographic projection.

•Hierarchical Data Format - Earth Observing System (HDF-EOS): NSIDC created this site to answer common questions about HDF-EOS and to provide simple methods for working with the HDF-EOS format. Tools are provided to convert from HDF-EOS to binary, and to dump HDF metadata into ASCII text.

NSIDC-developed AMSR-E tool set

- GUI-driven tool set to display and manipulate AMSR-E Level 2 and Level 3 data.
- Features
- Tools package will be entirely GUI-driven
- Released for IDL Virtual Machine
- Tools for displaying both grid (Level 3) and swath (Level 2) data
- Tools for re-gridding Level 3 data to alternative projections –
- Tools for custom gridding of Level 2 swath data (e.g., allowing user to grid only certain swaths or to use an alternative gridding algorithm)
- Tools for row-column and lat-lon subsetting
- Tools for creating composite images from 2 separate fields with capability of viewing both fields or just one field by colortable manipulation
- Tools should be available by the AGU Fall Meeting

NSIDC-developed AMSR-E tool set

Tools will work on all AMSR-E Level 2A, Level 2B, and Level 3 data

Tools for displaying both grid (Level 3) and swath (Level 2) data

- •User will have the option of selecting coastlines and/or lat-lon graticules for a map background
- •Default color palettes will be provided based on those currently used in NSIDC products

Tools for re-gridding Level 3 data to alternative projections

- •Will use existing NSIDC tools
- •Limited to map projections supported by IDL

Tools for custom gridding of Level 2 swath data

- •Allow user to grid only certain swaths or to use an alternative gridding algorithm
- •Limited to map projections supported by IDL

Tools package will be released for the IDL Virtual Machine so that users will not need to purchase any licenses

- •Source code will be available so that users can customize the tools
- •Users might want to add the capability for using additional map projections
- •Users might want to substitute their own color palettes

AMSR-E Distribution Statistics – From EDG Only

Distribution Statistics: Reported from EDGRS. All Distribution not including Data Pool

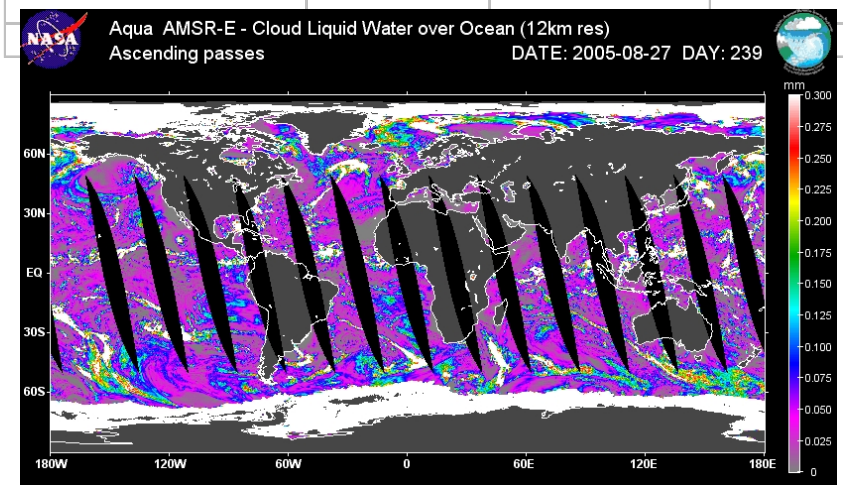
Daily data	Requests		Daily data	Granules		Daily data	Files		Daily data	Megabytes
AE_5DSNO.001	64		AE_5DSNO.001	544		AE_5DSNO.001	1152		AE_5DSNO.001	1150.079003
AE_DYOCN.001	21		AE_DYOCN.001	339		AE_DYOCN.001	1294		AE_DYOCN.001	4104.709694
AE_DYSNO.001	752		AE_DYSNO.001	5588		AE_DYSNO.001	11788		AE_DYSNO.001	11732091455
AE_L2A.001	55488		AE_L2A.001	218569		AE_L2A.001	438675		AE_L2A.001	17133053.49
AE_LAND.001	2042		AE_LAND.001	40932		AE_LAND.001	82254		AE_LAND.001	29024.55914
AE_LAND3.001	5719		AE_LAND3.001	18836		AE_LAND3.001	38292		AE_LAND3.001	1166789.076
AE_MOOCN.001	10		AE_MOOCN.001	106		AE_MOOCN.001	212		AE_MOOCN.001	1292.378792
AE_MOSNO.001	32		AE_MOSNO.001	156		AE_MOSNO.001	330		AE_MOSNO.001	336.532972
AE_OCEAN.001	188		AE_OCEAN.001	10063		AE_OCEAN.001	21610		AE_OCEAN.001	93075.94698
AE_PMSCI.001	2448		AE_PMSCI.001	2604		AE_PMSCI.001	7993		AE_PMSCI.001	207050.4802
AE_RAIN.001	3201		AE_RAIN.001	42072		AE_RAIN.001	84796		AE_RAIN.001	545808.4101
AE_RNGD.001	30		AE_RNGD.001	245		AE_RNGD.001	502		AE_RNGD.001	43.392088
AE_SI12.001	2340		AE_SI12.001	8064		AE_SI12.001	16770		AE_SI12.001	463438.799
AE_SI25.001	1918		AE_SI25.001	5529		AE_SI25.001	11712		AE_SI25.001	119351.5769
AE_SI6.001	2826		AE_SI6.001	4530		AE_SI6.001	9660		AE_SI6.001	200757.7355
AE_WKOCN.001	10		AE_WKOCN.001	138		AE_WKOCN.001	874		AE_WKOCN.001	1668.464888
AMSREL1A.001	425		AMSREL1A.001	2001		AMSREL1A.001	4600		AMSREL1A.001	75351.91839
PM1GBAD1.001	2489		PM1GBAD1.001	2573		PM1GBAD1.001	7725		PM1GBAD1.001	24760.45602
PM1GBAD4.001	5		PM1GBAD4.001	16		PM1GBAD4.001	48		PM1GBAD4.001	156.312769
PM1GBAD8.001	4		PM1GBAD8.001	4		PM1GBAD8.001	12		PM1GBAD8.001	12.627234
Total Result	80012		Total Result	362909		Total Result	740299		Total Result	20078959.04

NOTE: These are not necessarily unique users.

Thanks to Michelle Holm for statistics.

AMSR-E Distribution Statistics – From Data Pool Only

Data pool data type	Megabytes		Data pool data type	Number of Files		Data pool data type	Megabytes
AE_5DSNO	619.09		AE_5DSNO	469		METADATA	172.33
AE_DYOCN	1092.68		AE_DYOCN	110		SCIENCE	5302306.10
AE_DYSNO	1148.76		AE_DYSNO	1101		Total Result	5302478.43
AE_L2A	3013075.70		AE_L2A	79779			
AE_LAND	4545.31		AE_LAND	14007			
AE_LAND3	156621.27		AE_LAND3	5178			
AE_MOOCN	155.60		AE_MOOCN	19			
AE_MOSNO	147.60		AE_MOSNO	125			
AE_OCEAN	53619.91		AE_OCEAN	9110			
AE_RAIN	19993.29		AE_RAIN	2247			
AE_RNGD	2.00		AE_RNGD	36			
AE_SI12	107321.30		AE_SI12	3593			
AE_SI25	6634.75		AE_SI25	527			
AE_SI6	81796.72		AE_SI6	3552			
AE_WKOCN	395.04		AE_WKOCN	64			
AMSREL1A	1855309.40		AMSREL1A	99920			
Total Result	5302478.43		Total Result	219837			

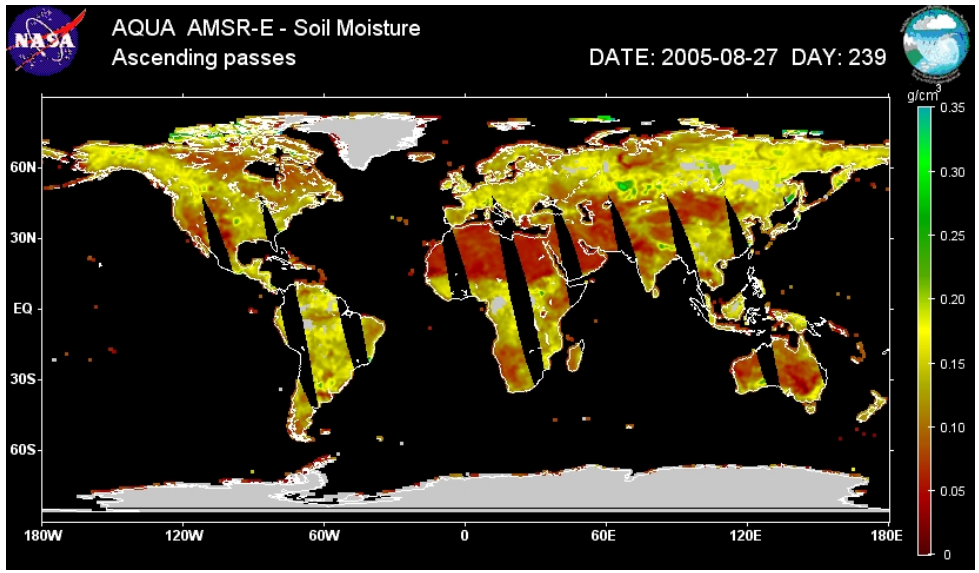


These stats are for dist from Data Pool only. Thanks to Michelle Holm for statistics.

★Most Popular Products★

Files, from EDGRS	
AE_L2A	438,675
AE_LAND	82,254
AE_RAIN	84,796

Files, from Data Pool	
AMSREL1A	99,920
AE_L2A	79,779
AE_LAND	14,007
AE_OCEAN	9,110



AMSR-E Distribution Statistics -- # of Users/Product and # of Requests/Product

AMSRE Trak					
Data ESDT	**Sum - Users**	**Sum - Request**	**Total Sum - Users**	**Total Sum - Requests**	
AMSR L0	8	11	8	11	
AMSREL1A	48	70	48	70	
AE_L2A	181	3643	181	3643	
AE_Ocean	26	71	26	71	
AE_Rain	44	200	44	200	
AE_Land	47	117	47	117	
AE_SI6	25	68	25	68	
AE_SI12	35	80	35	80	
AE_SI25	25	36	25	36	
AE_DySno	31	121	31	121	
AE_5DSno	17	31	17	31	
AE_MoSno	11	14	11	14	
AE_DyOcn	12	14	12	14	
AE_WkOcn	3	7	3	7	
AE_MoOcn	5	7	5	7	
AE_Land3	96	328	96	328	
AE_RnGd	16	18	16	18	
AMSRE NRT	173	190	173	190	
AMSR/ADEOS L1A	1	1	1	1	
AMSR Val Registrat	32	33	32	33	
Total Result	836	5060	836	5060	

You cannot total across products to get the total number of distinct users for all AMSR-E products. A given user may order more than one type of data product.

Thanks to Michelle Holm for these statistics.

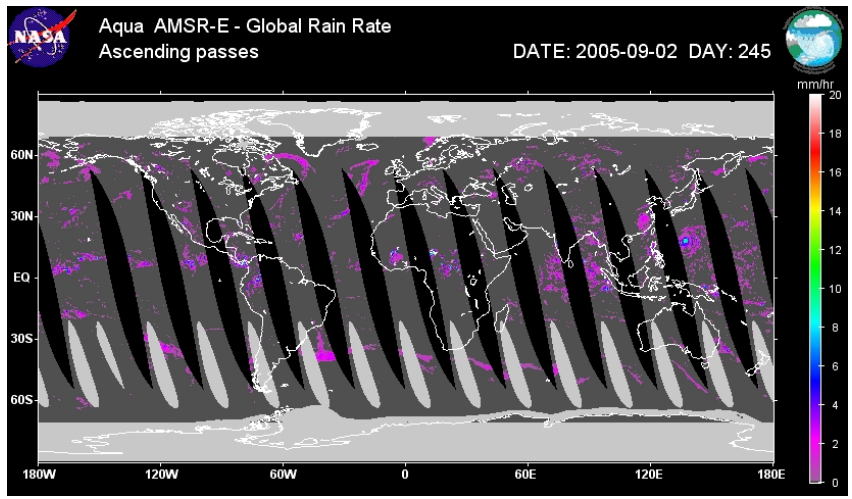
Number of Users of Preliminary Data

Tools and NRT Distribution			
Data Type	**Distinct Users**	**Number of Files**	**Volume Mbytes**
AMSRE NRT (standard)	153	13507	376966.689
AMSRE NRT (campaigns)	173	8785	3166.855
AMSRE NRT Total **	190	22292	380133.544

http://nsidc.org/data/amsre/prelim.html

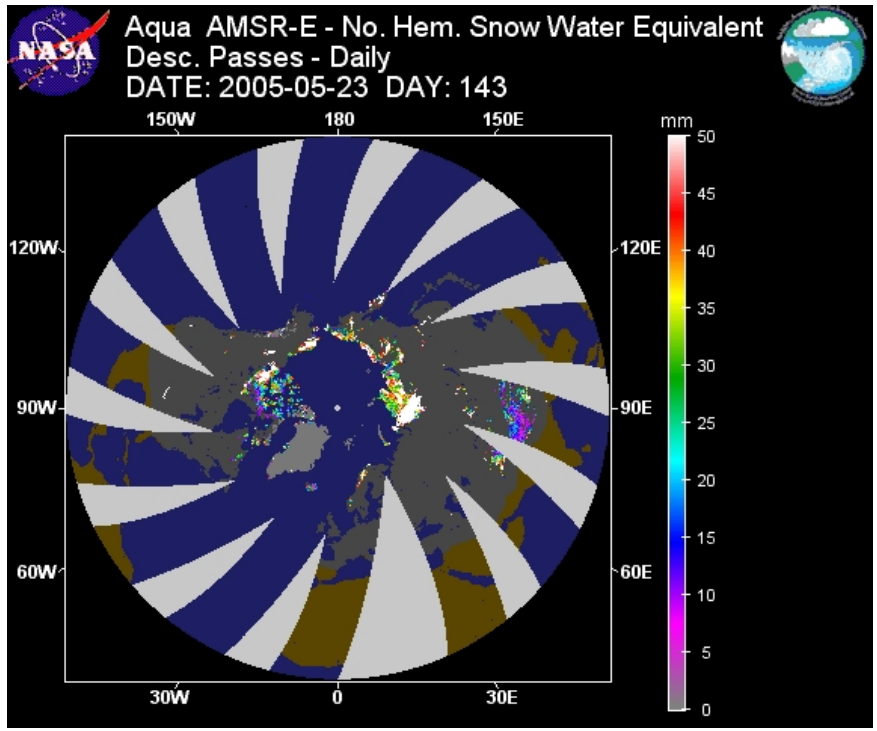
Users must register for these data.

Served from our non-ECS server.



AMSR-E Tools – Distribution Statistics

Data Type	Distinct Users	Number of Files	Volume Mbytes
as2gt	129	395	176.698
landmasks	44	204	130.357



Question for JAXA

In July, an anomalous L1A granule:

P1AME050602178MD_P01A0000000.00

The roll, pitch and yaw for this file have large values for the last 500 scans.

In addition, the roll, pitch, and yaw values for the last scans are not the same as the values for the first scans of the subsequent file.

JAXA reported that they extrapolated the geolocation and reprocessed this file, because the GBAD data werent' available quickly.

Question:

Can JAXA set a flag in such files to indicate that such an extrapolation (interpolation) has been performed?

Questions/Comments to Science Team

- L1A Product
  - Users need to know its calibration and geolocation and their errors
- L2A Product
  - Similarly, users need to know its calibration and geolocation and their errors
  - NSIDC has made progress compiling, building and running the L2A production code, which runs only on Windows platform with MS Developer Studio; still trying to get correct L2A output

Summary

- Users are ordering data (lots) and tools
- We need to do some work on our documentation, and we need input from you – the algorithm developers
  - ATBD updates
  - Questions
  - Error estimates

Thanks to the hard work of:

Jason Wolfe – Technical writer ^

*Walt Meier – Scientist

*Amanda Paserba – User Services

Lisa Ballagh – User Services

Jeff Smith – Programmer

*Siri Jodha Khalsa – Science rep.

Cari Gallup -- Operations

Doug Fowler – Testing

Cathy Fowler – DBA

*Are present at today's meeting

^Jason has left NSIDC.

Lynn French is our new writer.

Backup Slides

AMSR-E Data at NSIDC

Ordering AMSR-E Data from NSIDC

Data Pool: All AMSR-E products are retained for 160 days. See AMSR-E Temporal Coverage.

EOS Data Gateway: This interface provides access to the entire archive of data.

Search 'N Order Interface (SNOWI): This tool provides a quick and simple way to search and order limited products from NSIDC and other Distributed Active Archive Centers (DAACs).

Preliminary FTP Data: Registration is required to access the most recent eight days of data via FTP.

The links in data set titles below provide access to documentation.

Short Name	Data Set Title	Order Options
AMSREL1A	AMSR-E/Aqua L1A Raw Observation Counts	Data Pool SNOWI EOS Data Gateway
AE_L2A	AMSR-E/Aqua L2A Global Swath Spatially-Resampled Brightness Temperatures (Tb)	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_Land	AMSR-E/Aqua L2B Surface Soil Moisture, Ancillary Parms, & QC EASE-Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_Land3	AMSR-E/Aqua Daily L3 Surface Soil Moisture, Interpretive Parms, & QC EASE-Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_Rain	AMSR-E/Aqua L2B Global Swath Rain Rate/Type GSFC Profiling Algorithm	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data

AE_RnGd	AMSR-E/Aqua Monthly L3 5x5 deg Rainfall Accumulations	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_Ocean	AMSR-E/Aqua L2B Global Swath Ocean Products derived from Wentz Algorithm	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_DyOcn	AMSR-E/Aqua Daily L3 Global Ascending/Descending .25x.25 deg Ocean Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_WkOcn	AMSR-E/Aqua Weekly L3 Global Ascending/Descending .25x.25 deg Ocean Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_MoOcn	AMSR-E/Aqua Monthly L3 Global Ascending/Descending .25x.25 deg Ocean Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_DySno	AMSR-E/Aqua Daily L3 Global Snow Water Equivalent EASE-Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_5DSno	AMSR-E/Aqua 5-Day L3 Global Snow Water Equivalent EASE-Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_MoSno	AMSR-E/Aqua Monthly L3 Global Snow Water Equivalent EASE-Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_SI6	AMSR-E/Aqua Daily L3 6.25 km 89 GHz Brightness Temperature (Tb) Polar Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_SI12	AMSR-E/Aqua Daily L3 12.5 km Tb, Sea Ice Conc., & Snow Depth Polar Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data
AE_SI25	AMSR-E/Aqua Daily L3 25 km Tb, Sea Ice Temperature, & Sea Ice Conc. Polar Grids	Data Pool SNOWI EOS Data Gateway Preliminary FTP Data

AMSR-E Distribution Statistics – User Affiliations

Affiliation	Users
(empty)	1362
Foreign Commercial	41
Foreign Education	148
Foreign Government	18
Foreign Organization	2
Foreign Unknown	285
Unknown	48
US Commercial	273
US Education	334
US Government	197
US Organization	130
US Unknown	11
Total Result	**2849**

AMSR-E Data: Standard and Preliminary (Near-Real-Time) Data Products

STANDARD DATA PRODUCTS

- L0 Science, Engineering, and GBAD Data
- L1A Raw Sensor Counts
- L2A Swath Brightness Temperatures (Tbs)
- L2B Ocean Products
- L2B Soil Moisture Products
- L2B Rainfall Products
- L3 Daily Ocean Grids
- L3 Weekly Ocean Grids
- L3 Monthly Ocean Grids
- L3 Daily Snow Water Equivalent EASE-Grid
- L3 5-Day Snow Water Equivalent EASE-Grid
- L3 Monthly Snow Water Equivalent EASE-Grid
- L3 Daily 6.25 km 89 GHz Tbs Polar Grids
- L3 Daily 12.5 km Tbs, sea ice concentrations, & snow depths over sea ice
- L3 Daily 25 km Tbs, sea ice concentrations & sea ice temperatures
- L3 Soil Moisture Products
- L3 Monthly Rainfall Grids
- Browse

NEAR-REAL-TIME PRODUCTS

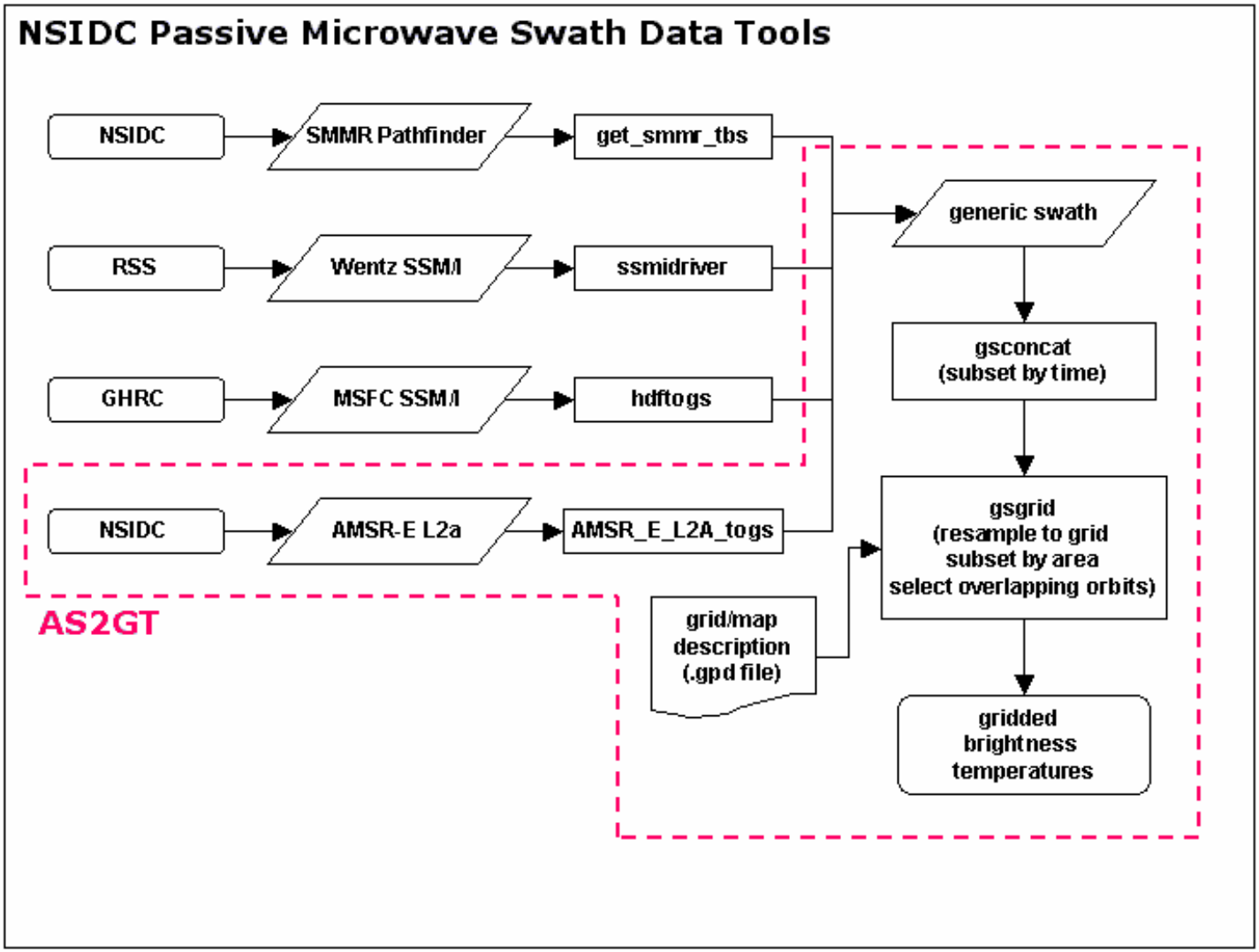
- ***
- ***
- L2A Swath Brightness Temperatures (Tbs)
- L2B Ocean Products
- L2B Soil Moisture Products
- L2B Rainfall Products
- L3 Daily Ocean Grids
- ***
- ***
- L3 Daily Snow Water Equivalent EASE-Grid
- ***
- ***
- L3 Daily 6.25 km 89 GHz Tbs Polar Grids
- L3 Daily 12.5 km Tbs, sea ice concentrations, & snow depths over sea ice
- L3 Daily 25 km Tbs, sea ice concentrations & sea ice temperatures
- L3 Soil Moisture Products
- ***
- ***

AS2GT: AMSR-E Swath-to-Grid Toolkit

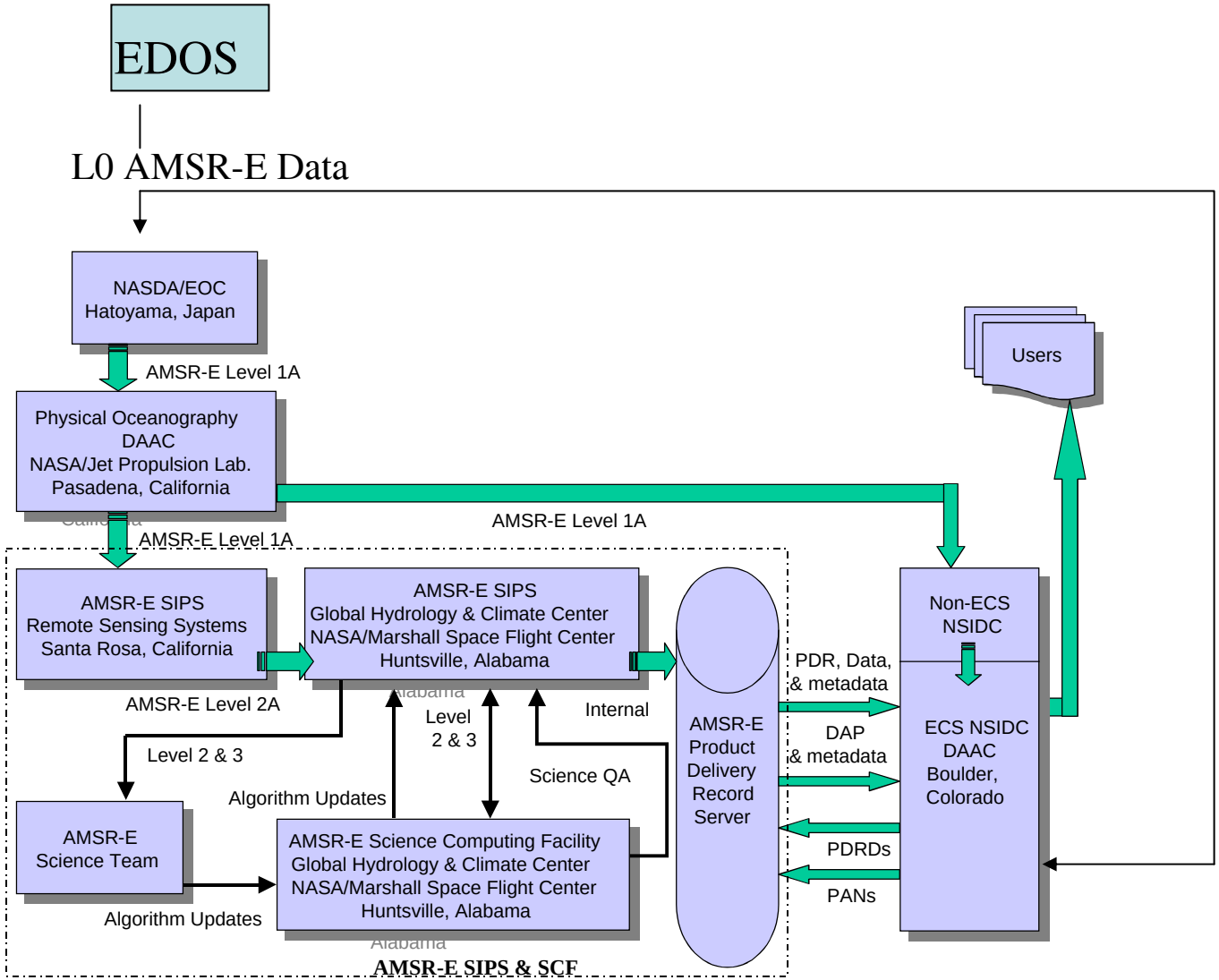
•NSIDC's Ken Knowles developed AS2GT.
•The AMSR-E Swath-to-Grid Toolkit (AS2GT) is a suite of software tools to subset and grid Levels 1B and 2A AMSR-E swath data.
•AS2GT makes it possible to quickly and easily work with the AMSR-E data in ways that may not be available in the Level 3 gridded data sets.
•This toolkit allows you to process data into custom grids with whatever temporal or spatial resolution you require.
•AS2GT maintains the highest data quality for your application by giving you control over map projection, number of samples per day, input resolution and interpolation method.

Gridding options in AS2GT include:
•Map projection
•Resolution and grid dimensions
•Resampling method
•How to handle overlapping swaths
•Subsetting by time or region

AS2GT: AMSR-E Swath-to-Grid Toolkit



AMSR-E Data Flow Interfaces



MSR-E Data Products

Short Name	Data Level	Collection Description	Delivery Frequency	Data Volume uncompressed
PM1GBAD1	Level-0	Ground-Based Attitude Determination Data for EOS Aqua in 1 second intervals	Every two hours	small
PM1GBAD4	Level-0	Ground-Based Attitude Determination Data for EOS Aqua in 4 second intervals	Every two hours	small
PM1GBAD8	Level-0	Ground-Based Attitude Determination Data for EOS Aqua in 8 second intervals	Every two hours	small
AE-PMSCI	Level-0	AMSR-E Science and Engineering Data	Every two hours	1.3 GB/day
AMSR_L1A	L1A	ADEOS-II AMSR L1A Raw Observation Counts	~28 half-orbits / day	1.2 GB/day
AMSREL1A	L1A	Aqua AMSR-E L1A Raw Observation Counts	~28 half-orbits / day	1.2 GB/day

AMSR-E Data Products (cont.)

Short Name	Data Level	Collection Description	Delivery Frequency	Data Volume uncompressed
AE_L2A	Level-2A	Aqua AMSR-E global swath Brightness Temperatures are resampled at resolutions of 57 km, 36 km, 21 km, 11 km, and 5.5 km.	~28 half-orbits / day	2.489 GB/day
AE_Ocean	Level-2B	Aqua AMSR-E global swath ocean wind speed at 36 and 21 km res., water vapor over ocean at 21 km res., cloud liquid water at 11 km res., and sea surface temperature at 57 and 36 km res. generated using the Wentz Algorithm and Level-2A product.	~28 half-orbits /day	277.1 MB/day
AE_Land	Level-2B	Aqua AMSR-E swath surface soil moisture and interpretive parameters including surface type, vegetation water content, surface temperature, and QC parameters are generated from Level-2A AMSR-E TBs spatially resampled to a nominal 25 km equal area earth grid	~28 half-orbits /day	11.9 MB/day
AE_Rain	Level-2B	Aqua AMSR-E global swath rain rate and rain type products are generated using the Level-2A spatially resampled TBs as input. Over ocean the Goddard Profiling Algorithm produces rain rates and types; over land the Ferraro Algorithm is used.	~28 half-orbits /day	497.7 MB/day
AE_RnGd	Level-3	Aqua AMSR-E global monthly global rainfall accumulations are 5 x 5 degree grids generated using the Wilheit Algorithm and Level-2 rain products as input.	1 / month	.005 MB/month
AE_DyOcn	Level-3	Aqua AMSR-E global ocean Level-3 daily products are .25 x .25 degree ascending and descending grids generated using the six Level-2B ocean products as input.	1 / day	14.5 MB/day

AMSR-E Data Products (cont.)

Short Name	Data Level	Collection Description	Delivery Frequency	Data Volume uncompressed
AE_WkOcn	Level-3	Aqua AMSR-E global ocean Level-3 weekly products are .25 x .25 degree ascending and descending grids generated using the six Level-2B ocean products as input.	1 / week	12.4 MB/week
AE_MoOcn	Level-3	Aqua AMSR-E global ocean Level-3 monthly products are .25 x .25 degree grids generated using the six Level-2B ocean products as input.	1 / month	12.4 MB/month
AE_DySno	Level-3	Aqua AMSR-E Level-3 daily product contains global snow water equivalent EASE grids. Snow depth EASE grids are included as research products.	1 / day	4.2 MB/day
AE_5DSno	Level-3	Aqua AMSR-E Level-3 product contains 5-day global snow water equivalent EASE grids. Snow depth EASE grids are included as research products	1 / day	4.2 MB/ 5-day
AE_MoSno	Level-3	Aqua AMSR-E Level-3 product contains monthly global snow water equivalent EASE grids. Snow depth EASE girds are included as research products	1 / month	4.2 MB/month
AE_WkOcn	Level-3	Aqua AMSR-E global ocean Level-3 weekly products are .25 x .25 degree ascending and descending grids generated using the six Level-2B ocean products as input.	1 / week	12.4 MB/week

AMSR-E Data Products (cont.)

Short Name	Data Level	Collection Description	Delivery Frequency	Data Volume uncompressed
AE_SI6	Level-3	Aqua AMSR-E Level-3 products at 6.25 km contain polar stereographic grids of 89.0 GHz brightness temperatures . Grids are daily averages, daily ascending averages, and daily descending averages.	1 / day	46.3 MB/day
AE_SI12	Level-3	Aqua AMSR-E Level-3 products at 12.5 km are polar stereographic grids of sea ice concentration, snow depth over ice, 18 - 89.0 GHz TBs. The sea ice concentration and TBs are daily, daily asc, and daily desc grids. The snow depth is a 5-day grid.	1 / day	64.6 MB/day
AE_SI25	Level-3	Aqua AMSR-E Level-3 products at 25 km contain polar stereographic grids of sea ice concentration, sea ice temperature, 6.925, 10.65, 18.7, 23.8, 36.5, and 89.0 GHz TBs. Grids are daily averages, daily ascending averages, and daily descending averages.	1 / day	22.4 MB/day
AE_Land3	Level-3	Global surface soil moisture with vegetation water content, surface temperature, and TB parameters are generated on a nominal 25-km equal area earth grid by time-compositing the Level-2B parameters, separately for ascending and descending passes.	1 / day	58.3 MB/day